II. REMARKS

1.   Claims 40-116 remain in the application. Claims 1-39 and 117 have been cancelled without prejudice.

2.   Applicants respectfully submit that claims 40-116 comply with the written description requirement of 35 USC 112, first paragraph.

The Examiner is of the opinion that in claim 40, the phrase "wherein said modified pixel value <u>is made available for use in INTRA prediction of an image block within the same image as said current decoded image block and said previously decoded image block</u>" is not supported by the original application.

The Examiner states that the specification doesn't support the claimed feature of "<u>INTRA prediction of an image block within the same image as said current decoded image block and said previously decoded image block</u>" wherein "<u>said current decoded image block</u>" and "<u>said previously decoded image block</u>" are used during the filtering process.

Examiner has noted the sections of the specification that are relevant to the claimed feature, namely Page 18, lines 21-27 and Page 19, lines 18-23. However, Applicants respectfully submit that it seems that the Examiner has not understood which blocks (<u>an image block within the same image, said current decoded image block, said previously decoded image block</u>) are being filtered and which block is being predicted in INTRA mode. Applicants respectfully suggest that it is also possible that the Examiner has not understood what pixel values are used in the filtering.

First independent claim 40 reads:

A method for reducing visual artefacts in a digital image comprising a plurality of image blocks in which image blocks are encoded to form encoded image blocks and said encoded image blocks are subsequently decoded to form decoded image blocks, each decoded image block comprising a number of

reconstructed pixels, each reconstructed pixel having an associated pixel value and filtering is performed to reduce visual artefacts due to a boundary between a current decoded image block and a previously decoded image block adjacent to the current decoded image block such that the pixel value of at least one reconstructed pixel in at least one of said current decoded image block and said previously decoded image block is modified by filtering to produce a modified pixel value, wherein said modified pixel value is made available for use in INTRA prediction of an image block within the same image as said current decoded image block and said previously decoded image block." (emphasis added)

The support for the claimed feature of "wherein said modified pixel value is made available for use in INTRA prediction of an image block within the same image as said current decoded image block and said previously decoded image block" can be found in several sections of the specification, including the sections noted by the Examiner, Page 18, lines 21-27 and Page 19, lines 18-23.

The specification on page 17, first paragraph recites:

The encoder of the digital image transmission system also includes decoding functionality. The encoded prediction error of the current block is decoded in prediction error decoding block 30 and is subsequently summed in summer 31 with the predicted pixel values for the current block. In this way, a decoded version of the current block is obtained. The decoded current block is then directed to a block boundary filter 32, implemented according to the method of the invention. … the block boundary filter 32 examines 602, 604, if the current (just decoded) block has boundaries that can be filtered. … If at least one boundary is found, the block boundary filter retrieves 605 those pixel values that belong to the adjacent block of the present boundary to be used in the filtering process. The block boundary filter performs the filtering 606 according to a preferred filtering method and updates at least the modified pixel values in the current block and the values of pixels filtered in previously decoded blocks

3

stored in the frame buffer 33. The block boundary filter then examines 608 whether there are still boundaries to be filtered. If other boundaries are to be filtered the process returns to step 605. The block filter performs analogous operations on each block of the frame being coded until all blocks have been encoded and locally decoded. As each block is filtered it is made available for use e.g. in the prediction and/or filtering of subsequent blocks by storing it in the frame buffer 33."

The specification on page 19, lines 18-23 recites:

[0067] The block filter performs analogous operations on each block of the frame, substantially immediately after each block is decoded, until all blocks have been decoded and their boundaries appropriately filtered. As each block is filtered it is made available for use e.g. in the prediction and/or filtering subsequent blocks by storing it in the frame buffer 39.

It is clear from page 17 first paragraph, page 18 lines 21-27, and page 19 lines 18-23 that filtering is performed at the block boundaries between the current block (said current decoded image block) and a previously decoded image block adjacent to the current decoded image block (said previously decoded image block). The pixel values of both the current block and the previously decoded blocks may be updated. The updated pixel values (said modified pixel value) are stored in the frame buffer that is made available (is made available) for the prediction (for use in INTRA prediction) of the subsequent blocks (of an image block within the same image). Here, the term "subsequent blocks" refers to any image block within the same image as said current decoded image block and said previously decoded image block.

Thus, claim 40 is supported by the specification, and does include subject matter described in the specification in a way that conveys to one skilled in the art that the inventors had possession of the claimed invention at the time of filing, as required by 35 USC 112, first paragraph.

Claims 52, 58, 65, 76, 83, 94, 97, 98, 108, 111, and 114 are also supported by the specification and also comply with 35 USC 112, first paragraph.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

Please charge $450.00 to Deposit Account No. 16-1350 for a two (2) month extension of time.

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,

Joseph V. Gamberdell, Jr.   Date 29 November 2006
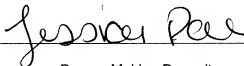Reg. No. 44,695

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